

Department of Energy

Idaho Operations Office 850 Energy Drive Idaho Falls, Idaho 83401-1563

December 7, 2000

Mr. Wayne Pierre, Team Leader
Environmental Cleanup Office
U.S. Environmental Protection Agency
Region X
1200 Sixth Avenue
Seattle, Washington 98101

Mr. Dean Nygard, Site Remediation Manager Waste Management and Remediation Division Idaho Department of Environmental Quality 1410 N. Hilton Boise, Idaho 83706

SUBJECT:

Contract No. DE-AC07-99ID13727 - Transmittal of Auxiliary Reactor Area (ARA)-

02 Sanitary Waste System Analytical Data - (EM-ER-231-00)

References: (a)

DOE-ID, June 2000, Field Sampling Plan for the Waste Area Group 5 Remedial Action, Phase 1 DOE/ID-10758, U.S. Department of Energy, Idaho Operations Office

(b) 40 CFR 261, Code of Federal Regulations, Title 40, "Protection of the Environment," Subpart C, "Characteristics of Hazardous Waste," Part 261, "Identification and Listing of Hazardous Waste"

Dear Mr. Pierre and Mr. Nygard:

This letter transmits copies of the ARA-02 analytical data from the August 2000 sampling of the ARA-02 Sanitary Waste System components. The samples were collected in accordance with the *Field Sampling Plan for the Waste Area Group 5 Remedial Action, Phase 1* (DOE/ID-10758). A table summarizing the detected analytes from the reports is included with each copy.

Samples of the concrete were collected from the three septic tanks, the three manholes, and the connecting piping. In addition, samples were collected from the seepage pit pumice blocks. The samples were analyzed for radionuclides (including gross alpha/beta and gamma spectrometric analyses), polychlorinated biphenyls (PCBs), semivolatile organic compound (SVOC), toxicity characteristic leaching procedure (TCLP) metals, and volatile organic compound (VOC) analyses. The seepage pit pumice block samples were also analyzed for dioxins and furans because the samples

previously collected from the sludge contained in the seepage pit had detectable concentrations of dioxins and furans.

The gamma spectrometric and gross alpha/beta analyses detected minor concentrations of radionuclides in all samples submitted for analysis. The gamma-emitting radionuclides included some manmade isotopes. The PCB analyses detected concentrations of Aroclor-1016 and Aroclor-1260 in some samples at levels below the regulatory limit of 50 parts per million (ppm). The seepage pit pumice block samples contained detectable concentrations of dioxins and furans at levels below regulatory concern. None of the samples demonstrated that the wastes were characteristic in accordance with the Resource Conservation and Recovery Act definition as specified in 40 CFR 261 Subpart C, "Characteristics of Hazardous Waste." To alleviate any confusion concerning the total metals results of the rinsate water, TCLP analysis is not applicable to water samples; therefore, the rinsate sample was submitted for total metals analysis.

If you have any questions or comments regarding this document, please contact Carol Hathaway at 208-526-4049 or myself at 208-526-4392.

Sincerely,

Kathleen E. Hain, Director

Kathleen E. Hain

Environmental Restoration Division

Enclosures

CC:

Rick Poeton, EPA, 1200 Sixth Avenue, Seattle, WA 98101; 2 copies Ted Livieratos, IDHW DEQ; 3 copies